

LABORSTAT

Swiss based Trafag is a leading international supplier of high quality sensors and monitoring instruments for the measurement of pressure and temperature.



Applications

- Machine tools

Features

- Without housing
- Short response time
- Electrical connection on terminal screw

Technical Data

Designation of application	Remote sensing thermostat, skeleton type	Switching differential	Adjustable / not adjustable
Measuring range	-30°C ... +40°C to +70°C ... +350°C	Repeatability	± 0.5 % FS typ.
Output signal	Floating change-over contact	Approval / conformity	EN60730-1/ EN60730-2-9: Typ 2.B.H

01/2017

Data sheet H72122m

Subject to change

Ordering information/type code

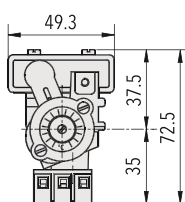
		XXX	XX	XX	XXX	XX	XXXXXXXXXX	XX	XX
Custom build code	Front panel mounting, screw terminal	736							
	Screw terminal	754							
Microswitch	Small switching differential, not adjustable	10							
	Average switching differential, not adjustable	11							
	With gold plated contacts, not adjustable	21							
	Adjustable large switching differential	24							
	Adjustable standard switching differential	25							
Range	Range [°C]	Sensor max. [°C]		Range [°C]	Sensor max. [°C]				
	-30 ... +40	45	01	+20 ... +110	115	23			
	-10 ... +80	85	95	+20 ... +150	165	31			
	0 ... +35	70	09	+20 ... +230	250	24			
	+5 ... +95	105	20	+40 ... +300	330	53			
	+10 ... +45	85	11	+70 ... +350	380	54			
Sensor ¹⁾	Range	Sensor diameter [mm]	Sensor material		Range	Sensor diameter [mm]	Sensor material		
	01, 09, 11	Ø7	Stainless steel	421	24, 53, 54	Ø4.7	Copper	112	
	95, 20, 23, 31	Ø4.7	Stainless steel	311	24, 53, 54	Ø7	Copper	122	
	95, 20, 23, 31	Ø7	Stainless steel	321	24, 53, 54	Ø9	Copper	132	
	95, 20, 23, 31	Ø9	Stainless steel	331	01, 09, 11	Ø4.7	Copper nickel plated	413	
	24, 53, 54	Ø4.7	Stainless steel	111	01, 09, 11	Ø7	Copper nickel plated	423	
	24, 53, 54	Ø7	Stainless steel	121	01, 09, 11	Ø9	Copper nickel plated	433	
	24, 53, 54	Ø9	Stainless steel	131	95, 20, 23, 31	Ø4.7	Copper nickel plated	313	
	01, 09, 11	Ø4.7	Copper	412	95, 20, 23, 31	Ø7	Copper nickel plated	323	
	01, 09, 11	Ø7	Copper	422	95, 20, 23, 31	Ø9	Copper nickel plated	333	
	01, 09, 11	Ø9	Copper	432	24, 53, 54	Ø4.7	Copper nickel plated	113	
	95, 20, 23, 31	Ø4.7	Copper	312	24, 53, 54	Ø7	Copper nickel plated	123	
	95, 20, 23, 31	Ø7	Copper	322	24, 53, 54	Ø9	Copper nickel plated	133	
	95, 20, 23, 31	Ø9	Copper	332					
Fixing ²⁾	Nut M10 (for remote sensing version) ⁴⁾							10	
	Console (for remote sensing version) ⁴⁾							17	
	Bracket (for remote sensing version) ⁴⁾							27	
	Grubscrew locked, lateral (direct mounting version) ⁴⁾							12	
	Captive nut (for direct mounting version) ⁴⁾							14	
	Grubscrew locked with thermal distance piece (for direct mounting version) ⁴⁾							18	
	Standard directly mounted on protection tube, only for type 736							00	
Protection tube	See data sheet H72114/H72163							XXXX.XXXX	
Accessories	Switchpoint locking ⁴⁾	15		Condensators over Pin 1-2 / 1-3				23	
	Switchpoint fixed and sealed upon customer's request ⁴⁾	88		Railway version (UIC 616)				28	
	Switchpoint preset upon customer's request, no guarantee on switching accuracy ⁴⁾	83		Capillary tube protection: Flexible metal tube, brass nickel plated				90	
	Switchpoint adjustment please indicate when ordering: - Switchpoint [°C]			Capillary tube protection: Flexible metal tube 1.4541/V2A				91	
	- Increasing or decreasing			Capillary tube protection: PVC tube				92	
Capillary tube length	Capillary tube length up to 5000 mm (no specification required for direct mounting on protection tube) L=XXXX ³⁾								

¹⁾ See data sheet H72114/H72163²⁾ See data sheet H72106³⁾ Overlengths upon request⁴⁾ Only for type 754

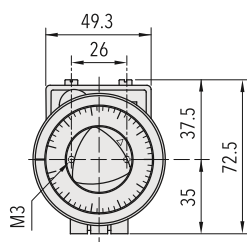
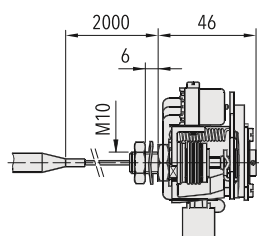
Standard products (extra short lead time)

Product No.	Type Code	Sensor material	Temperature range [°C]	Switching differential [°C]	Sensor max. [°C]
L35	754 2509 422 10	Copper	0 ... +35	0.7 ... 10 (adjustable)	60
L40	754 2501 422 10	Copper	-30 ... +40	0.7 ... 10 (adjustable)	45
L95	754 2520 322 10	Copper	+5 ... +95	2 ... 12 (adjustable)	105
L150	754 2531 322 10	Copper	+20 ... +150	2.5 ... 16 (adjustable)	165
L230S	754 2524 121 10	1.4435/316L	+20 ... +230	3 ... 32 (adjustable)	250
L350S	754 2554 121 10	1.4435/316L	+70 ... +350	4 ... 40 (adjustable)	380

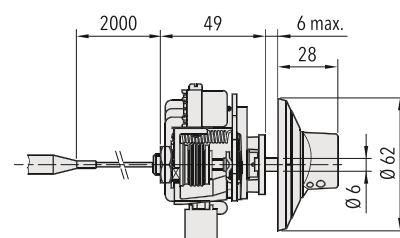
Dimensions



754.XXXX.XXX.XX...



736.XXXX.XXX.XX...



Specifications		
Accuracy	Repeatability	$\pm 0.5\%$ FS typ.
	Scale accuracy typ.	$\pm 2\%$ FS typ.
	Switching differential	See table
	Switching point	Temperature compensated with bimetal switch lever
Environmental Conditions	Ambient temperature	Range $\leq +45^{\circ}\text{C}$: $-30\ldots+50^{\circ}\text{C}$ Range $+45\ldots+250^{\circ}\text{C}$: $-30\ldots+70^{\circ}\text{C}$ Range $> +250^{\circ}\text{C}$: $-10\ldots+70^{\circ}\text{C}$ (Important: Temperature at sensor may not exceed maximum sensortemperature)
	Storage temperature	Range $\leq +45^{\circ}\text{C}$: $-30\ldots+50^{\circ}\text{C}$ Range $> +45^{\circ}\text{C}$: $-30\ldots+85^{\circ}\text{C}$
	Protection	IP00
	Humidity	Max. 95% relative
Mechanical Data	Housing	See ordering information
	Filling	Liquid
	Installation	Any position
	Weight	754: $\sim 250\text{ g}$ 736: $\sim 300\text{ g}$
Microswitch	Rating	See table
	Resistance of insulation	$> 2\text{ M}\Omega$
	Dielectric strength	$U \leq 250\text{V}$: 1.45 kV $U \leq 500\text{V}$: 2 kV terminal ground
	Life time (mechanical)	Microswitch 10/11/25: 20 Mio. cycles Microswitch 21: 0.5 Mio. cycles Microswitch 24: 0.3 Mio. cycles
Electrical connection	Terminal screw	$3 \times 1\ldots 2.5\text{ mm}^2$

Additional information		
Documents	Data sheet	www.trafag.com/H72122
	Instructions	www.trafag.com/H70211
	Flyer	www.trafag.com/H70967

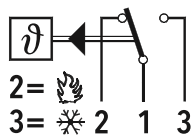
Switching differential typ.

Range	[°C]	-30 ... +40 0 ... +35 +10 ... +45	-10 ... +80 +5 ... +95 +20 ... +110	+20 ... +150	+20 ... +230	+40 ... +300 +70 ... +350
Microswitch 10 Switching differential (fixed value, not adjustable)	[°C]	0.3	0.8	1	1.2	2
Microswitch 11/21 Switching differential (fixed value, not adjustable)	[°C]	0.7	2	2.5	3	4
Microswitch 24 Switching differential (adjustable value)	[°C]	4 ... 21	5.5 ... 26	7 ... 34	15 ... 65	18 ... 84
Microswitch 25 Switching differential (adjustable value)	[°C]	0.7 ... 10	2 ... 12	2.5 ... 16	3 ... 32	4 ... 40

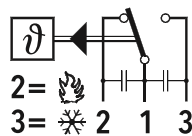
Electrical data switch

		Rating Resistive Load (Inductive Load)	
Type	Features	AC	DC
10	Small switching differential, not adjustable	125 V, 10 (1.5) A 250 V, 10 (1.25) A	250 V, 0.2 (0.02) A 125 V, 0.4 (0.03) A 30 V, 2 (1) A 14 V, 15 (2.5) A
11	Average switching differential, not adjustable	125 V, 15 (1.5) A 250 V, 15 (1.25) A 500 V, 10 (0.75) A	250 V, 0.25 (0.03) A 125 V, 0.5 (0.05) A 30 V, 6 (1.5) A 14 V, 15 (1.5) A
21	Gold plated contacts, not adjustable	24 V, 0.1 (0.1) A 12 V, 1 (1) A 5 V, 2 (2) A	24 V, 0.1 (0.1) A 12 V, 1 (1) A 5 V, 2 (2) A
25	Adjustable standard switching differential	125 V, 15 (1.5) A 250 V, 15 (1.25) A 500 V, 10 (0.75) A	250 V, 0.25 (0.03) A 125 V, 0.5 (0.05) A 30 V, 6 (1.5) A 14 V, 15 (2.5) A
24	Adjustable large switching differential	125 V, 15 (1.5) A 250 V, 15 (1.25) A 500 V, 10 (0.75) A	250 V, 0.3 (0.2) A 125 V, 0.75 (0.4) A 30 V, 15 (1.5) A 14 V, 15 (1.5) A

Electrical Connection



736/754



with accessory 23